UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MASSACHUSETTS

PAUL O'MARA and NEAL O'MARA,)
Plaintiffs/ Defendants-in-Counterclaim,)
) C.A. No: 05-11824-REK
V.)
MARK J. DONNELLY,)
SEBAGO PARTNERS, INC, and)
UCOMPAREHEALTHCARE, LLC)
Defendants/	,)
Plaintiffs-in-Counterclaim.	

REPLY MEMORANDUM OF MARK J. DONNELLY, SEBAGO PARTNERS, INC., AND UCOMPAREHEALTHCARE, LLC IN SUPPORT OF THEIR MOTION FOR PRELIMINARY INJUNCTION

By agreement, the Defendants-in-Counterclaim Paul and Neal O'Mara (the "O'Maras") submitted their opposition to the pending Motion for Preliminary Injunction at Noon today – January 3, 2006. With the Court's permission, Plaintiffs-in-Counterclaim Mark J. Donnelly ("Mr. Donnelly"), Sebago Partners, Inc. ("Sebago"), and UCompareHealthCare, LLC ("UCHC") submit this brief reply.

I. The Two Agreements the O'Maras' Signed are Unambiguous and Enforceable

The O'Maras contend that the General Confidentiality Agreement and the Detailed Confidentiality Agreement are unenforceable because neither specifically references "copyrights," and were not supported by consideration. Neither argument survives either a logical examination or a review of relevant documents.

A. <u>Copyrights Are Covered by the General Confidentiality Agreement and</u> the Detailed Confidentiality Agreement

The O'Maras focus on the fact that the word "copyright" is not stated in either agreement. They avoid entirely the point that the Detailed Confidentiality Agreement specifically defines "Inventions" as including "programs or program architecture" – which is exactly what each O'Mara undertook to generate for UCHC. There is no true ambiguity, nor did the O'Maras ever perceive one.

The latter point is borne out by Paul O'Mara's "Specification for Contractual Development Feasibility Phase Prototype." (Exhibit A, hereto). In this document, intended to define, inter alia, what was to be delivered to UCHC, O'Mara recites time and again that "Source code must contain UCHC copyright information as well as other legal statements deemed necessary by UCHC." See, e.g., Exhibit A at 4, 7, 9, 10, 13, 15, and 16. Both Paul and Neil O'Mara signed this document, clearly evidencing the fact that each understood he was developing software for UCHC. In addition, the copyright notice — "© 2005 UCompareHealthCare" — is prominently displayed on the web pages of the prototype website built by Neal O'Mara as well as on a separate, stand alone flow chart of the system prepared by Paul O'Mara.

In addition to being directly at odds with the express language of the Agreement and the prior actions of the O'Maras, the O'Maras' assertion that they retained the copyrights in the software is fundamentally inconsistent with the O'Maras' express confidentiality obligations under the Agreement. "Confidential Information" is broadly defined therein as "information disclosed to [the O'Maras] as a result of [their] relationship with SP, not generally known in the trade or industry in which SP is engaged, about SP's business operations, customers, suppliers, products [and] processes, ..."

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Simply stated, the O'Maras intended to, and did, convey to UCHC their ownership interest in the programs they were developing including any copyrights therein. This broad assignment language, when read in the context of the whole Agreement, is not susceptible of any other reasonable interpretation. For example, Section 4 of the Agreement – which states that the O'Maras "shall, whenever requested to do so by SP, execute any applications, assignments, or other instruments which SP shall consider necessary to apply for and obtain letters of patent, trademark, service marks, or the like in the United States, or any foreign country, or to protect otherwise SP's interests" (emphasis added) – confirms the all-inclusive nature of the assignment and the fact that it included the copyrights in the software they took from UCHC.

Finally, the lack of the word "copyright" in the Detailed Confidentiality

Agreement does not suggest that the O'Maras are not bound to assign them to UCHC.

Courts have held that the assignment provision of the Copyright Act, 17 U.S.C. Section

204(a), is capable of being satisfied even though the pertinent writing does not mention
the word "copyright". See, e.g., Schiller & Schmidt v. Nordisco, 969 F.2d 410 (7th Cir.

1992)("Although the agreement does not mention the word "copyright," its wording
leaves little doubt that Bertel sold all the assets of Spoltine Studios, tangible and
intangible alike."); Armento v. Laser Image, Inc., 950 F. Supp. 719, 730-31 (W.D.N.C.

1996) ("That the agreements omit the word 'copyright' is not dispositive, for their
wording clearly transfers the very copyright Armento claims were infringed, specifically
the right to control the reproduction and dissemination of these images."). The language
in the Agreement, when read as a whole, is sufficiently unambiguous as to the intent of

the parties – namely, that all ownership right, title and interest in and to the code, including any copyrights therein, vested solely and exclusively in UCHC.1

\mathbf{B}_{\cdot} The Agreements Were Supported By Consideration

Again, the O'Maras' affidavits are belied by their documents. They contend that each was entitled to 2.5% equity in the ensuing entity, plus other remuneration. An email between the brothers dated May 24, 2005 confirms less certainty than each has now professed under oath:

What did we say our minimum requirements were? 2.5% equity on launch, vested immediately, incremental vesting for additional equity (achieved at 1.37 million mark), golden parachute, and maybe and employment agreement? If they want to buy us out I say \$100K each and they can have the rights to everything we've done so far.

Exhibit B, hereto.

A better indication of the agreement is reflected in the company's minutes. The minutes of their first meeting, October 25, 2004 (Exhibit C, hereto) memorializes that "the stock in the Company would be based on "achievements of mutually agreed upon goals of the Company." Those goals would be clearly defined by our business process and will be directly tied to the successful achievement off each persons (sic) agreed upon 'deliverable.'" Exhibit C, hereto. The minutes continue:

With regard to the actual percentage Mark stated "at the end of the day it would be his goal to have Brian, Paul, Ryan and Jeff hold an equal percentage (in total) as that held by Mark.' This would have to [be] looked at and executed when the financial direction of the Company was established through the 'feasibility' phase of our process. Marks (sic) initial goal is to issue 2 and ½ percent to each of Brian, Paul, Ryan and Jeff. This issuance will be based on the successful implementation of the 'Concept' and launch of our company as well as a direct tie to the 'groups' agreed upon 'individual deliverables.'

Id. This is consistent with Donnelly's Affidavit Paragraph 17:

The O'Maras also deny material help with, for instance, the Modified Levy-Jennings chart. The email attached as Exhibit D - in which Donnelly describes the chart as "my original work," suggests the contrary. As the inconstancies mount, one might evaluate at least Paul O'Mara's veracity in light of his own (perhaps tongue-in-cheek) description as a "Fiendishly Clever Moron" See http://paulstrovsky.20m.com/paulomara.htm; see also http://struggle.net/bio/comments/posts/4681.htm.

Paul and Neal O'Mara worked with the other members of the team on the start-up of UCHC with the same arrangements and understandings of several other members of the team – namely, that they were not to be paid, but rather were to perform services in exchange for equity in the event that the venture turned out to be successful, they discharged their obligations, and their efforts contributed materially to the overall success. All members of the UCHC group agreed that, inasmuch as I was underwriting the entire cost of the venture, I would be the final arbiter of whether, and to what extent, each group member's efforts merited equity.

C. The Assignment Is Separately Enforceable

Fundamentally, the O'Maras argue that UCHC reneged on a commitment to issue them equity. Essentially, they argue that the bilateral contract contemplating work for equity is not supported by consideration because they worked and got nothing. UCHC rejects this formulation, but the debate is beside the point. The Agreements were enforceable when made, and a breach gives rise to an action for damages, not rescission. The assignment is a separate, independent agreement not subject to any conditions. "If the assignment of copyright is severable from other aspects of an agreement, failure to perform such other aspects will not give rise to a right of rescission with respect to the assigned copyright." Nimmer on Copyright, Section 10.15[A], p. 10-122 (citing Thompson v. Hubbard, 131 U.S. 123 (1889)). Even if recission were available, it is not pled. Rather, the O'Maras seek a declaratory judgment and damages.

CONCLUSION

For all the foregoing reasons, UCHC reiterates its request that this Court:

- (a) Orders the O'Maras to immediately transfer and assign all copyrights in the Works and to cooperate and assist in copyrighting any other materials covered under the Detailed Confidentiality Agreement;
- (b) Orders the O'Maras to immediately return to Sebago/UCHC all materials containing the trade secrets and other confidential information of Sebago/UCHC and to refrain from disclosing the contents of such confidential materials to any other persons in compliances with the General and Detailed Confidentiality Agreements.

Respectfully submitted,

MARK J. DONNELLY, SEBAGO PARTNERS, INC, and UCOMPAREHEALTHCARE, LLC,

By their attorneys,

/s/ TYLER E. CHAPMAN

Kevin T. Peters, BBO#550522 Tyler E. Chapman, BBO#637852 TODD & WELD LLP 28 State Street Boston, MA 02109 (617) 720-2626

January 3, 2006

Specifications for Contractual Development Feasibility Phase Prototype

All hold Market

SPECIFICATIONS FOR CONTRACTUAL PROGRAMMING FOR FEASIBILITY PHASE PROTOTYPE.....1 Back-End......4 Data-Pull (multiple programs/modules) Specifics.....4 Deliverables4 Acceptance Criteria for Deliverables.....4 Data Validation Specifics Deliverables Acceptance Criteria for Deliverables......7 Additional Details Data Verification Deliverables Acceptance Criteria for Deliverables Specifics 10 Deliverables......10 Acceptance Criteria for Deliverables Additional Details Deliverables Corporate Module Acceptance Criteria for Deliverables......15 Web Site Specifics

Back-End

These programs do the heavy lifting in terms of gathering, verifying, refining, and inserting data into the database. The back-end also includes SQL Server database objects which include stored procedures, views, triggers, etc.

Data-Pull (multiple programs/modules)

The data-pull component is responsible for gathering raw data from our sources. For the Feasibility Phase prototype, the medium will be CD and internet download from sites such as http://profiles.massmedboard.org/Profiles/MA-Physician-Profile-Find-Doctor.asp and http://oig.hhs.gov/fraud/exclusions/listofexcluded.html.

Note: Be sure to consider the fact that some doctors do not have information listed on the above page because they have voluntarily agreed not to practice medicine. We should try to capture this information (there is just one line in this situation rather than multiple lines of information like there are for active MDs).

The data pull must gather all required fields from OSCAR and MEDPAR data, this may include launching a SQL DTS package manually from an executable program (program is used to provide easy-to-use interface).

Specifics

- Must automatically gather data from pre-determined web location (probably FTP or ASP site) and load data into a delimited text file, from which it can be imported into SQL Server via a DTS package (Paul will write the DTS package).
- Must provide user-friendly interface for tape (3490E cartridge)/CD/other media data loads. Must be very simple and straightforward, with prompts for every step of the process. Programs downloading data from websites must have error notification for timeout or dropped connection situations.

Deliverables

- One or more executable programs (.EXEs) residing on the server with easily identifiable icons. These EXEs will be written in VB.Net.
- Documentation in the form of a ReadMe text file (.txt) that explains how to use the program(s).
- Clean, clear source code with comments identifying potential problem areas for future code maintenance. Err on the side of over-commenting rather than undercommenting in the source code. Source code must contain UCHC copyright information as well as any other legal statements deemed necessary by UCHC.

Acceptance Criteria for Deliverables

 Executable programs must be successfully used by Mark Donnelly without the help of any other individuals.

- Documentation must be sufficient in showing Mark how to use the programs.
- Source code versions must match executable versions, source code will be tested on a "virgin" development PC to ensure that all required components are included in the delivered package.

Additional Details

• Successful transfer of data will be confirmed by the Data Verification process and double-checked manually in the database by a developer.

Data Validation

Data Verification is perhaps one of the most complicated components to develop. Due to this complexity and the importance of not corrupting any of our data, the verification process is broken up into two logical phases. One phase will validate the data fields. The other will verify the acquired data against the source by matching and comparing fields from the multiple sources of the acquired data.

The field validation protocol is explained thoroughly in the *Specifics* section below. Overall, it consists of detailed regular expressions to subject our data through. Some examples include: (1) checking for null fields and; (2) discrepancies in database field expectations. For example, we will check to see if a physician's surname contains mostly alphabetic characters (allowing for the occasional number, apostrophe or hyphen) and ensure that the UPIN consists of one alphanumeric character followed by digits.

Data validation may also be performed via external programs, SQL Server utilities and within stored procedures. This protocol is subject to change at any time and, if modified, will clearly be stated to the developer.

Specifics

Data validation will be performed in a UAT (User Acceptance Test) environment, replicated from production, allowing for an accurate simulation. This environment will serve as our testing grounds for data verification and the layer between obtaining the raw data and production.

In the validation stage we will use the concept of regular expressions to validate the data fields. A regular expression is a pattern representing a class of character strings. In other words, it is used to define the patterns that must be matched by values of a data item.

Within UCHC's database, there will be a total of **NUMBER** fields. For each of these fields there is an expected sequence or pattern of characters for the value. Below is a complete breakdown of all imported fields and their expected character strings.

FIELD ID	EXPECTED CHAR. STRING
DOCTORS	
FIELD ID	EXPECTED CHAR. STRING
	EXPECTED CHAR. STRING
FIELD ID HOSPITALS	EXPECTED CHAR. STRING

Deliverables

- One or more executable programs (.EXEs) residing on the server with easily identifiable icons. These EXEs should be written in VB.Net.
- Documentation in the form of a ReadMe text file (.txt) that explains how to use the program(s).
- Clean, clear source code with comments identifying potential problem areas for future code maintenance. In all cases, excessive commenting is desired.

- Source code must contain UCHC copyright information as well as any other legal statements deemed necessary by UCHC.
- All code will be checked into UCHC's Microsoft Source Safe data repository upon completion and periodically throughout development.

Acceptance Criteria for Deliverables

- Mark Donnelly must successfully use the executable programs without the help of any other individuals.
- Documentation must be sufficient in showing Mark how to execute the programs.
- Source code versions must match executable versions. All production installs will come directly from source control and will **NEVER** be bypassed.
- Source code will be tested on a "virgin" development PC to ensure that all required components are included in the delivered package.

The developer:

- Must provide sufficient documentation so that a novice user can execute the verification program and receive a "Success" or "Failure" message.
- Must provide means of analyzing "Failure" conditions (that is, the user must be supplied with an explanation of why and where the failure occurred, as well as instructions on what to do next)
- Should log all verification transactions in the database.
- Must provide useful, informative and traceable error logs of any stderr (standard error) in all data acquisition, transfer and process phases.

Additional Details

• Keep in mind the fact that the data verification programs will be used to verify the Data-Pull.

Data Verification

For <u>the verification phase</u> we will be combining multiple data sources and building our intellectual property, our database. The finalized product will elaborately display to the end-user sundry data on physicians and hospitals, as well as nursing homes. In each category we will derive our database from acquired data and, using a primary key, compare matching data fields to check for discrepancies.

Specifics

To elaborate on the above introduction, in this stage we will focus on the integrity of our data, as opposed to stage 1, where we validate the integrity of our data sources. Once we ensure, to the best of our abilities, that the imported data is valid, we will use this stage to verify the accuracy of our redundant data sources.

Once the database is sorted and the proper attributes are associated with each entity, the multiple tables will be compared. This comparison will pair each table's Primary Keys and match the table row's contents for accuracy. There will be multiple data sources to compare from so if inaccuracies surface, the incorrect source should be quite noticeable.

Below are the official data sources for each category as well as the Primary Keys for means of commonality and comparison:

Physicians

- o American Medical Association (AMA)
- o Drug Enforcement Administration (DEA)
- o Department of Health and Human Services (HHS)
- o Food and Drug Administration (FDA)
- o State medical and osteopathic licensing boards from all 50 states
- o http://profiles.massmedboard.org/Profiles/MA-Physician-Profile-Find-Doctor.asp

Primary Key: UPIN

Hospitals

- o American Hospital Association (AHA)
- o Joint Commission on Accreditation of healthcare Organizations (JCOHA)
- o Medicare Provider Analysis and Review (MEDPAR)
- o Online Survey and Certification Reporting System (OSCAR)

Primary Key: ProviderID

Deliverables

- One or more executable programs (.EXEs) residing on the server with easily identifiable icons. These EXEs should be written in VB.Net.
- Documentation in the form of a ReadMe text file (.txt) that explains how to use the program(s).
- If verification is performed in part or in full through stored procedures, the process and algorithm must be documented. If Paul assumes responsibility for the stored procedures, he should provide this documentation. However, it is ultimately the developer's responsibility to ensure that this is completed.
- Clean, clear source code with comments identifying potential problem areas for future code maintenance. In all cases, excessive commenting is desired. The developer should verify that comments are included wherever necessary, regardless of which developer writes the stored procedures.

- Source code must contain UCHC copyright information as well as any other legal statements deemed necessary by UCHC.
- All code will be checked into UCHC's Microsoft Source Safe data repository upon completion and sporadically throughout development.

Acceptance Criteria for Deliverables

- Mark Donnelly must successfully use executable programs without the help of any other individual. If verification is performed through stored procedures rather than an executable program, Mark will be provided with a means of invoking the procedures. This may be done through a simple program, through a spreadsheet (Excel is fully capable of executing stored procs via Microsoft Query), or possibly on the database directly. The programmer may choose the means of enabling Mark to execute the stored procedures, but the chosen method must first be approved by IT.
- Documentation must be sufficient in showing Mark how to perform the verification. Depending on the circumstances, full user-level documentation may not be useful (for example, if verification stored procedures are invoked automatically through triggers or table constraints on the database, it is not practical to fully document how to do this.)
- Program/Stored Proc(s) should log failures in an Error table on the database for future analysis.
- The developer must provide sufficient documentation so that a novice user can run the verification program and receive a "Success" or "Failure" message.
- The developer must provide a means of analyzing "Failure" conditions with an explanation of why and where the failure occurred, as well as instructions for proceeding onward.
- If a program is used, testing will consist of executing two verification procedures. One will be performed against a "clean" data set. The next will be against the same data set after a slight manual corruption (slight as in one letter in one name in one record in one field will be changed). The program must catch this manual corruption.
- If a combination of program(s) and stored procedure(s) is used, IT will determine which testing method will be sufficient.

If table constraints are used for verification, follow the rules provided for stored procedures rather than executable programs.

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Test Module for Data Flow and Verification (Optional)

In order to prove that the backbone components are working as they should, it might be beneficial to provide a full Test Module separate from the components rather than modifying the components in several different places just for the sake of testing. The testing requirements listed above may be combined in this Test Module. This in no way changes the acceptance criteria, it is merely an alternative approach that the programmer might find more attractive.

Specifics

- Must fulfill all testing requirements as listed in the Acceptance Criteria for each component.
- Must provide sufficient documentation so that a novice user can perform all tests with minimal training (given the scope of this module some direct user training will probably be required...and appreciated). At the very least, documentation must include some step-by-step walkthroughs for performing back-end tests.
- Must provide means of analyzing "Failure" conditions.
- Should log failures in an Error table on the database for future analysis.
- Must provide user with a large amount of flexibility for simulating data corruption. Otherwise, the test module could prevent the user from finding a bug, thus rendering the test module counter-productive.

Deliverables

- One or more executable programs (.EXEs) residing on the server with easily identifiable icons. These EXEs should be written in VB.Net.
- Documentation in the form of a ReadMe text file (.txt) that explains how to use the program(s).
- Clean, clear source code with comments identifying potential problem areas for future code maintenance. Err on the side of over-commenting rather than undercommenting in the source code. Source code must contain UCHC copyright information as well as any other legal statements deemed necessary by UCHC.

Acceptance Criteria for Deliverables

- Executable programs must be successfully used by Mark Donnelly. This module will most likely require some direct hands-on training due to the scope of its functionality.
- Documentation and/or hands-on training must be provided²
- Must fulfill all testing criteria for all back-end components³

² I realize that this is a very weak requirement, but if the programmer decides to go through the extra effort to provide a full test module for the back-end it is reasonable to expect that sufficient training will be provided. Since the test module is not a requirement it doesn't make sense to impose strict acceptance criteria beyond those included in the back-end components.

³ If the programmer decides to provide a test module for some but not all back-end components, the test module will only need to fulfill the requirements for the components it is designed to test. The other

Additional Details

• Although the addition of a test module may at first appear to be extra work, the programmer should consider the benefits of separating the functional aspects of each component from the testing requirements. It may prove much easier to create a dedicated testing program.

components (those not tested by the test module) must include the modifications required to fulfill their respective acceptance criteria.

Front-End

The front-end program is to be a web-application written in VB.Net. It will be the means through which users will access information stored in the UCHC database. This includes all aspects involved in the delivery of professional, user-friendly web pages. Focus will be on look-and-feel, ease of navigation, speed (especially for database queries) and content. For the Feasibility Phase prototype, the web application will be run from the computer that is used to host the database. The web site will then be accessed from a client machine via the internet. To protect UCHC's trade secrets, the URL will not be established or disclosed until development of the feasibility phase prototype is complete.

Credit Card Processing

The web application must provide credit-card processing functionality. This functionality will be purchased in a pre-packaged form that can be integrated into the web application⁴. Integration of the credit-card processing package is expected to be very easy and straightforward. The vendor we use will probably provide tech support and documentation to ensure proper implementation.

Specifics

- Must provide analysis of options for credit-card processing packages from a program integration and security standpoint. Include a cost-benefit analysis of different packages on the market.
- Must provide user-friendly, secure interface for gathering credit-card information
- Must integrate credit-card processing with the rest of the site. ASP (or suitable alternative) will be used.
- Must deposit money directly into UCHC's bank account. Verify the percentage taken out of every transaction for each credit card company. If this is too high we will need to find another package.

Deliverables

- Web page that allows user to enter credit card information for American Express, MasterCard or Visa. We may choose to include PayPal at a future date. This should be taken into consideration during development.
- Successful Visa, MasterCard and American Express transactions, with money showing up in UCHC's designated bank account within 3 days.
- Easily accessible Help file that shows users what to do step-by-step.
- Easy to find links to UCHC Home Page and other important pages (such as privacy policy, etc.)
- Clean, clear source code with comments identifying potential problem areas for future code maintenance. Err on the side of over-commenting rather than under-

⁴ A quick web-search revealed a company that provides a credit-card processing package that costs \$395 per server. The yearly charge for secure site registration can be purchased through this company for \$95 per year (retail price is \$229). For more information, go to http://www.dotnetcharge.com/orders.htm

commenting in the source code. Source code must contain UCHC copyright information as well as any other legal statements deemed necessary by UCHC.

Acceptance Criteria for Deliverables

- Web page must be successfully used by test-customer (and/or Mark) without the help of any other individuals.
- On-screen instructions must be sufficient in showing user how to submit credit card information. Test user(s) must approve of documentation.
- Source code versions must match executable versions, source code will be tested on a "virgin" development PC to ensure that all required components are included in the delivered package.

Corporate Module

UCHC's initial business approach is based on the concept of selling our product to local businesses as a value-added component for their employees' healthcare benefits. The motivation for employers to use UCHC is not only to provide their employees with a useful service, but also to implement a means of systematically collecting and analyzing survey data regarding health care. Having a solid understanding of what employees use, need and desire in a health care package gives an employer a significant advantage in negotiating health care contracts that can easily translate to substantial savings that far outweigh the cost of our service.

Consumer Assessment of Health Plans (CAHPS) is a survey used to gauge various aspects of a health plan. UCHC will provide its corporate customers with a module that incorporates this survey for any employees who use UCHC as a tool when researching doctors, hospitals, nursing homes, etc. This module will require employees to take the survey electronically before accessing UCHC's other services. Six months later, employees will be asked to take the survey again. This provides employers with a "before and after" analysis of employee experiences with the health plan.

From a programming perspective, this component must be launched automatically when an employee signs-in under the corporate account (the employee is free to purchase our services as an individual and therefore not take the CAHP survey).

An administrative module will also need to be included in this component. The administrative tool will allow the employer (most likely in the form of the HR department) to create or modify a profile for its employees. This includes a mildly-customized Welcome page with corporate-customer specific information, such as a logo and contact information for a company's HR department.

Specifics

- Must provide mock-up CAHPS survey in easy-to-read electronic format. CAHPS
 is a substantial project in and of itself and therefore will not be required in the
 feasibility prototype. The prototype should be designed with the future
 implementation of CAHPS in mind.
- Must provide administrative tool that allows employers to make certain changes to their corporate profile.
- Must include administrative reporting tool that provides aggregate survey information.
- Must include "super" administrative module to allow UCHC representatives to create subscriber accounts, including initial subscriber profile.

Deliverables

 Web page that requires corporate users to take survey before continuing on to other parts of the UCHC website and at the prescribed time interval (default is 6 months after the first survey is taken).

- Mock-up survey page, including means of efficiently sending data to database (stored procedure will be written by Paul to accept the data from the web application).
- Administrative module for corporate users.
- Employer able to select CAHPS questions based on prescribed question set (based on demographic information of employees)
- Easily accessible Help that shows users what to do step-by-step. This applies to both the survey and the administrative module.
- Clean, clear source code with comments identifying potential problem areas for future code maintenance. Err on the side of over-commenting rather than undercommenting in the source code. Source code must contain UCHC copyright information as well as any other legal statements deemed necessary by UCHC.
- Legal approval for HIPAA and other requirements⁵

Acceptance Criteria for Deliverables

- Web page must be successfully used by test-customer(s) (and/or Mark) without the help of any other individuals.
- Documentation must be sufficient in showing users how to mark their answers to survey questions and how to submit the survey when they are finished.
- Help file for administrative module must be approved by test-customer(s) (and/or Mark)
- Source code versions must match executable versions, source code will be tested on a "virgin" development PC to ensure that all required components are included in the delivered package.

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⁵ This item is not necessarily the responsibility of the programmer, but is included as a reminder just in case it is overlooked elsewhere

Web Site

This portion of the project is contingent upon the delivery of a pre-approved website shell which will include all HTML and picture files required for the portions of the site that users will see. Brian Richardson is responsible for delivering the website shell to the developer. The developer will then integrate this design into the web application, working closely with Brian as necessary.

Specifics

- Must provide User Login capability
- Potential security issues must be identified and resolved, when practical (prototype does not need to fulfill the stringent security requirements that will be necessary for production version)
- Must provide toolbar functionality with standard links (including drop-down link menus)
- Must identify and address user session issues (timeouts, invalid logins, etc.)

Deliverables

- Secure login with capability to deal with forgotten UserID or Password in an industry-standard manner (most likely by sending UserID and Password to Email address associated with user profile).
- Email confirmation: "Receipt of Order"
- Fully functional web site that enables users to perform all of the tasks an employee using a corporate account would perform.
- Ability for new user to sign up for subscription service, create profile, login, and view reports. For this situation, subscription period will be limited to a short period of time so that we can ensure the account is no longer usable after expiration.
- Clean, clear source code with comments identifying potential problem areas for future code maintenance. Err on the side of over-commenting rather than undercommenting in the source code. Source code must contain UCHC copyright information as well as any other legal statements deemed necessary by UCHC.

Acceptance Criteria for Deliverables

- Web page must be successfully used by test-customer(s) (and/or Mark) without the help of any other individuals.
- Source code versions must match executable versions, source code will be tested
 on a "virgin" development PC to ensure that all required components are included
 in the delivered package.

Reporting Component

This component is where UCHC offers its true value. This is where customers select criteria from a list and query the UCHC database. The reporting component displays choices, gathers criteria from the user, sends the criteria to the database, receives a response from the database, displays the results on the web page, and provides the user with the ability to print, e-mail, or export the results to another program.

The user must be able to click on any column heading for a brief description of the field.

Specifics

• Reports will be designed directly with Mark Donnelly.

Deliverables

- Basic listing reports for MDs, Hospitals and Nursing Homes
- Detailed comparison reports for MDs, Hospitals and Nursing Homes

Acceptance Criteria for Deliverables

• Reports approved by Mark Donnelly

Additional Details

- Reports should include ability to print comparison report onto regular sized paper (i.e., report does not span several pages in width)
- User should be able to view a comparison report for a certain number of days after it is produced
- Ability to save comparison report in PDF format (PDF file should include relevant legal information, including a disclaimer and the date the file was created)

file:///c:/DOCUME~1/RYANDO~1/LOCALS~1/Temp/RE%20Office.htm

From: Neal O'Mara [nomara@uchc1.com]

Sent: Tuesday, May 24, 2005 1:58 PM

To: 'Paul OMara'

Subject: RE: Office

l am meeting with these Allegiance dude in an hour. What are we going to need them to do in terms of network administration? Back-up our stuff for us? Do updates? Check security? What? I really have no clue, I've never worked in an office before and I don't know what needs to be done. Please let me know what we will be needing them to do.

- Ne

From: Paul OMara [mailto:pomara@uchc1.com]

Sent: Tuesday, May 24, 2005 1:55 PM

To: Neal O'Mara

Subject: RE: Office

should consider how judgmental he and Jeff and Ryan were about Chris and Nicholas (the Tricet guy). I'm glad you explained the crap to him. Ugh. This is so annoying. My email to Mark was a reaction to him declaring that I am too judgmental about everything when I really think he I thought he already talked to Jeff about not giving outsiders information. I know I did before the last Jonathan incident but whatever. I am so sick of this bullshit.

because he thinks their computers are crappy. I think we need to get this fucking show on the road so we can start developing. Even if we need I agree that we should use Dell and All Covered and that Mark fucked us up by making initial contact. I think Jeff will object strongly to Dell to change something it won't cost us too much and at least we'll have most of what we need...

(achieved at 1.37 million mark), golden parachute, and maybe an employment agreement? If they want to buy us out I say \$100k each and What did we say our minimum requirements were? 2.5% equity on launch, vested immediately, incremental vesting for additional equity they can have the rights to everything we've done so far.

Please keep me posted on further developments. I have a feeling there's going to be a lot of bullshit tonight for us to deal with. Let's try not to commit to anything unless it's exactly what we asked for. file:///c:/DOCUME~1/KYANDO~1/LOCALS~1/1emp**失%2vUffice.ntm

Later, Paul

Neal O'Mara <nomara@uchcl.com> wrote:

Jeff and Mark were here, but they are both at lunch now. The mood got tense for a while when Mark and I discussed the deal and you and Jeff.

I told him that our main problem was with the agreement and that the most important part was that we dont get crap for four years (and he has the power to get rid of us) and that we would prefer vesting over time. It sounds like he is going to consider it.

explained where we are coming from on the Jeff/Jon thing and showed him the emails that show that Jeff clearly told Jon what you expressly told him not to. I also told him that it probably keeps getting brought up because they keep bringing up me working for Sterling. Mark wants to figure He showed me the email you wrote him which I have to admit was kind of caustic, but I wasnt here to judge what he said to you to incite it. I out all of this tonight and make sure that you and Jeff can get along and move past this.

We have some guy from Allegiance Systems coming in today at 3. I guess they do general network administration stuff like backups, updates, etc. Do you have any questions youd like to ask him? What duties exactly would we like Allegiance to perform for us?

hed like to work for equity, but Mark said no. This guy is going to go over our code and designs. I told Mark that he will be most helpful after we Thursday some old dude with a lot of experience is going to come in. He used SPOC the other day and wants to work with us. He even said write our technical specifications for the full product, but he may be able to help point me or you in the right direction in a few areas.

do (except for possibly All Covered) is pick computers for us. HP and IBM told us we need to get our shit together. We were looking for them to The whole hardware thing is annoying me. We thought that they would be providing us with network diagrams and solutions when in fact all they provide us with help in terms of network planning while they expected us to already have it. I guess this is what we get for having Mark talk to them initially and then me from thereon out. I didnt figure out until the last call with IBM that they don't do network planning shit, which they said they told Mark at the beginning. We should just go with the Dell stuff (only 80 something grand with software, right?) and have All Covered install it for us (3 grand). We will have the ETL Server off the network and the web server on one subnet (the DMZ), the WebDB Server on another subnet, and the internal network on the final subnet. It is the best way and cheapest way to do this and I am sick of talking to people whose job it is to pick out computers for us.

I think I am going to go to lunch now

From: Paul OMara [mailto:pomara@uchc1.com] Sent: Tuesday, May 24, 2005 10:52 AM To: Neal O'Mara Subject: Office

file:///c:/DOCUME~I/RYANDO~I/LOCALS~I/Tem~\text{k%2UVItice.ntm}

are jeff and mark at the office too? how is the mood?

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UCompareHealthCare.Com



... Helping People Make Informed Healthcare Decisions

TO; Jeff. Brian, Paul and Ryan

FROM: Mark Donnelly

DATE: October 25, 2004

SUBJECT: Minutes and Action Items of Meeting Held 10-21-04

Our first meeting was held at 883 Edgell Road, Framingham on 10/21/04 @ 6:00 PM. Those present are reflected above. The following will highlight each item discussed and the associated Action Items which followed.

Mark described the concept and need for "IP" as well as presented each member with the "Confidential" manual which will serve as the blue print and repository of information leading to the creation of the "Business Plan" for UCompareHealthCare.com

Discussion relating to "Organizational Issues" and the roll each of us will play in the development, implementation, operations, documentation and launch of the Company. After discussions it was agreed the following would define our areas of contribution.

Jeff Lapoint.

Oversee and participate in the formation of Sales/Marketing & Finance of the Company.

Paul O'Mara.

Acquisition of data from various sources, validation and testing of data as well as all aspects of the "Quality Process", "Design Control" and "R&D".

Working in conjugation with Prior Dishardson to develop "Process".

Working in conjunction with Brian Richardson to develop "Processes and Procedures" for all aspects of the operations relating to the database and sources. Work with Brian in the execution of our "feasibility phase" of the WEB Site as well as the development of the full written "Specifications" for hardware, software and associated wealth as the development of the full written "Specifications" for hardware,

software and associated quality processes.

Ryan Donnelly

General administrative operations, participate in the Sales process, interface with the Board of Advisors, ongoing research into various metrics and there validity and applicability with the goal of developing "Proprietary Metrics" and it's application to our technology and business.

Brian Richardson:

Oversee and participate in all aspects of our "IP" technology with special attention to the development, implementation and ongoing monitoring of the "IP" portion of our technology. Participate and manage the Company's development of the "strategic planning process". Be responsible for the overall visual presentation of

our Web site including, design, implementation, strategic links and

implementation of the privacy policy. Work with Paul in the development of a "Total Specifications Package" consistent with our soon to be "Quality Process". Have responsibility for management of the various "cultural interfaces" necessary

in the development and implementation of the Company's "Concept".

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Mark Donnelly

Oversee the implementation of the "Business Plan" consistent with the "Concept" of the Company. Manage the resources of the Team to assure success. Provide all financial resources. Manage the Legal process to include but not be limited to licensing, acquisition and use of specific data. Recruit and manage the resources of the "Advisory Board". Perform all appropriate duties in the formation, licensing and general legal responsibilities necessary to form a legitimate corporation. Responsible for the recruitment and formation of the "Board of Directors".

ACTION ITEM (AII)

Each individual listed above is responsible to have, 1) Bio appropriate for inclusion in the business plan, 2) Job description and title reflective of the agreed upon areas of interest above. Every effort should be made to have this information complete and in a format consistent with current business practices. Due at the next meeting 11/4/04 @ 6:00 PM 883 Edgell Road.

Stock:

The next item of business centered around the issuance of stock in the Company. Mark explained that the issuance of stock in the Company would be based on "achievements of mutually agreed upon goals of the Company". Those goals would be clearly defined by our business process and will be directly tied to the successful achievement of each persons agreed upon "deliverable".

With regard to the actual percentage Mark stated "at the end of the day it would be his goal to have Brian, Paul, Ryan and Jeff hold an equal percentage (in total) as that held by Mark". This would have to looked at and executed when the financial direction of the Company was established through the "feasibility" phase of our process. Marks initial goal is to issue 2 and ½ percent to each of Brain, Paul, Ryan and Jeff. This issuance will be based on the successful implementation of the "Concept" and launch of our company as well as a direct tie to the "groups" agreed upon "individual deliverables".

Current Competition:

Jeff present a complete competitive analysis of those sites, companies or the like that offer "Web based" services for the comparison of the MD, Hospital and Nursing Home markets. Of those he listed, 16 have been defined as a "competitors". The group reviewed and listened to Jeff's presentation. The information that was provided is to be included in summary form in the "Confidential Manual" under the "competition" section. It was generally agreed that no other company offers what our "Concept" details. It was also established that the general format and strategy of our "Market Introduction Strategy" i.e. use of the "Corporate Module" (CAHPS format) is not currently used by any other company.

ACTION ITEM (AII)

Each person is to review and comment on the 16 sites that have been identified in Jeff's presentation as "Competitors". Review should include the general understanding of the use of this data(market position) for those specific Web sites.

Page 3

Metrics:

Ryan presented a summary of the current thought process relating to metrics as it applies to the measurement of healthcare quality in a comparative environment. It is generally accepted that there are no currently available metrics which apply to our "concept" and that the use of metrics initially, may subject our company to ridicule. The information that was supplied should be inserted into the "Metrics" section of the "Confidential Manual". The group agreed that the use of metrics should be a "phased in" process as metrics become available and are acceptable and appropriate for our use. The group agreed that we would present data that has been collected from other sources and thus limits the liability and subjective nature of "grading" healthcare providers. Data that will be included is to yet be determined. The quality and validity of the data will be ascertained and it's performance confirmed through our "Quality Process". The process of data selection for inclusion will evolve Mark and the Advisory Board". It was also pointed out that our development should meet several of the criteria which is listed in Ryan's presentation and is referenced to the Rand report (please see Table 2. Techniques to Increase the Effectiveness of Health Care Report Cards), page 2 of presentation dated 10/21/04.

CAHPS Health Survey

Ryan provided a handout (#2) which outlined the questions used in the CAHPS survey form. It is our intent to utilize this format and reporting method to provide a "Corporate Module" to our service. This will provide "added value" to out product and will be used to generate the first stream of revenue for the company.

Jeff has requested that any additional or relevant Web sites should be directed to him. He will be responsible for the maintenance and competitive review of these sites.

LEWIN GROUP REPORT

Jeff found the above referenced report and it has been included into the "Confidential Manual" which has been issued to you. This report could be the single most important reference relating to the "Concept". It covers a enormous amount of information and is exquisitely detailed in it's scope. We all need to read this and fully understand what is contained. We should also be thinking about what we can do to further separate ourselves from the competition or old and new companies.

ACTION ITEM (Brain and Paul)

Read and comprehend the above referenced document. It is clear that this will be the start of the "Specification Package" which will lead us through "Feasibility" and on to "Final Product Release". Special attention should be given to how they validate data and establish it's reproducibility, all of which we will need to include in our overall pursuit of "Operating in a State of Control". It is your responsibility to review and start to design a "Specification Package" necessary for the implementation and building of the "Feasibility Prototype System". Please give proper planning consideration to the implementation of the following items

- 1. Acquisition (non-financial) of data and establishment of validity from source.
- 2. Migration of data with consideration to frequency of download, type and source of data, measurement of quality parameters of data and inclusion process.
- 3. SOP's (Standard Operating Protocol) design of forms, sign off procedure, general procedures, implementation and coordination with the Quality process and associated metrics.
- 4. Maintenance of all functional parts of Web site (hardware and software), data and related security, financial (credit card process) and user information.
- 5. Establish necessary hardware, software requirements and related technology to implement "Prototype" and establish clear feasibility in the "Concept".
- 6. Estimation of Total Cost of feasibility with line item analysis and justification relating to applicability in the "long term" of our plan.

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Our next meeting will be on November 4, 2004 @ the same location and time (6:00 PM) dinner will be provided.

Please make any comments that you would like and cc all those that attended with your comments if any.

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Date:
          Sun, 24 Apr 2005 19:16:39 -0400
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From: "Neal O'Mara" < neal.omara@gmail.com>

AHOO PM ASTEV-11824-REK

"Mark Donnelly" <mdonnelly@supawash.com>

ct: Re: the advanced metrics chart

"Ryan Donnelly" <ryan_donnelly@comcast.net>, "Paul O'Mara" <pomara1@gmail.com>, "Jeff LaPointe" CC: <iml 5@yahoo.com>

When talking about a margin of error, I am assuming that we want to provide the user with information regarding how a hospital does for all instances of a given procedure, not just how good the hospital does on Medicare patients. If this is not the case, then we can ignore the margin of error but I believe doing so would be misleading.

If we do indeed want to give the consumer information about how a hospital does for all of its care, not just for Medicare patients, then we are going to have a margin of error. This is because the records we have represent a sample, not the whole population. We need to use inference to make a statement about the hospital's population (all of the procedures of that kind that the hospital has performed during the year).

Disregard the margin of error figure I gave in my last email (+/- 1.67%), I think I used the wrong equation to calculate it.

I believe the correct equation is:

margin of error = square root of (estimated probability of success * estimated probability of failure / sample size)

This is also called the standard error.

For a 95% confidence interval, the z statistic is 1.96. The probability of a success (the person lives) and the probability of a failure (the person dies) will be estimated using the mortality rate we obtain for the hospital's hip replacements done through medicare. We will say that this figure is 2.0%.

for a hospital in MA that we have records of 200 hip replacements for:

```
stic = 1.96
Z
sample size = 200
estimated probability of success = 0.98
estimated probability of failure = 0.02
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margin of error = 1.96 * square root of (0.98 * 0.02 / 200)

margin of error = 1.94%

This means that our 95% confidence interval is from (2.0% - 1.94%) to (2.0% + 1.94%) = 0.06% to 3.94%.

This means that 95% of the time we took a random sample of records from all of that hospital's records for that procedure. we would calculate a mortality rate between 0.06% and 3.94%. This is similar (but not exactly the same as) to saying that we are 95% confident that the true mortality rate is between 0.06% and 3.94%.

This confidence interval is calculated assuming that the hospital did an infinite number of hip replacements that year. This is obviously not true. As a result, if we know what percent of all the procedures our sample represents, we can narrow the confidence interval.

I am going to say that our sample represents 50% of all of the hip replacements this hospital did during the year. This is a somewhat reasonable assumption since the medpar data contains 50% of all hospital records for the year.

If we have 200 hip replacement records for the hospital and we assume the hospital has done 400 hip replacements during the year, we include a finite population correction factor (FPC) to calculate the margin of error.

margin of error = square root of (estimated probability of success * estimated probability of failure / sample size) * FPC

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square root of (population size - sample size / population size - 1)
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margin of error = 1.96 * square root of (0.98 * 0.02 / 200) * square root of (400 - 200 / 400 - 1)

margin of error = 1.37%

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Let's say that "above average" (the top 25% of hospitals) is defined as having a 0.0% to 0.7% mortality rate. Let's also say that "average" (middle 50% of hospitals) is defined as 0.7% to 2.2%. Finally, "below average" (the bottom 25% of hospitals) is defined as 2.2% to 5.5%.

cannot determine what category our hospital belongs in. This is because its confidence interval spans all three ries. If it only spanned two, I would personally be okay with placing it in one category (the true mortality rate is not likely in the same category as the sample mortality rate).

This is all unnecessary if we don't want to provide the consumer with information about which hospital is better for ALL hip replacements, not just for the hip replacements that are recorded in MedPAR.

I hope this helps.

- Neal

On 4/24/05, Mark Donnelly <mdonnelly@supawash.com> wrote:

Dear Neal:

Sorry it has taken me so long to respond. This requires significant thought. Here are my thoughts and my suggested approach.

The first thing that I need to understand is how the "margin of error" is actually calculated in your presentation. In my 'ginal work I presented the CV% as a method of looking at the precision of the events (each hospitals calculated tality rate in relation to all others for the population) and observed that it was rather wide (as I recall 20 - 40%). The ني) was a way for me to visualize the performance of > 50% of the population (hospitals). After we determined through the histograms that many of the measures (population) were indeed not all Gaussian (some are), we determined that we would need to review the data once we actually got the MEDPar data and had the ability to actually run the data and see what the populations look like. Nondas has suggested that the "binning" be more refined as to more accurately reflect the true population. I agree that we still need to do this before we come to a firm decision as to what we actually do. The reason that I state the above is that I am looking to go backwards in the statistical derivation to a point of certainty. This is what I mean. Let's take your example of Hip replacement mortality rate in Massachusetts (0% - 3%). I do not know what you mean by the error is +/- 1.67%. As I see it when you calculate the hip replacement mortality rate the following is considered. Did the patient have a hip replacement and did the pat ient die as a result in that institution (APR-DRG Risk Adjusted and calculated as required by AHRQ). No error here they (the appropriate population of patients) lived or they died. The calculation requires an N > or = to 20 (statistical significance). Then the % is calculated for that particular hospital. This is a mathematical fact. Once we take all of the Hospitals (it has not been determined if we will use national or regional values to look at our mean values (or whatever we choice) we then enter the "uncertainty" that you have discussed relating to our calculation. If we go back we can with certainty say the hospital has an X% mortality rate for that hospital and we can state that with 100% certainty. When we go to graph it and we see that everyone has done the same (most have 0% mortality rates) could we adjust the plotting to give a script where the plot would state "Most hospitals have a 0% mortality rate for this measure" or something like it? "Refer to the volume indicator to compare volumes performed" at which point we would graph the volumes and that graph should be a straight forward graphical approach in the format you have suggested. This is also helpful to the user as they see that everyone lives at most hospitals but they may want to go to the hospital that has done the most of hip replacement surgeries.

I see the following influencing what we do. 1) What is the difference in calculations on national and regional bases? 2) 'hat is the "scatter" of the results on a nation and regional basis? 3) If we find everyone doing the same can we stitute script within the graphical presentation that states the issue and explains?

The graph you have provided is "ideal". I agree with making the green (average) area twice as large as the blue and red area and I agree with the calculation of the percentile as a means of allowing the scale to be appropriate for plotting.

whatever that is have Nendas and one other person (yet to be determined) check it out and give it their blessing.

Thanks again and sorry to take so long. We will plan to discuss this at our meeting on Tuesday 4/26/05 at 801 Water eet. Your question continue to challenge my brain!

Best regards,

Mark

----Original Message----

From: Neal O'Mara [mailto: neal.omara@gmail.com]

Sent: Saturday, April 23, 2005 1:06 PM

To: Mark Donnelly; Ryan Donnelly; Paul O'Mara; Jeff LaPointe

Subject: the advanced metrics chart

Guys,

We have agreed on using a sort of combination between a boxplot and a Levy-Jennings chart to display advanced metric comparisons. The new chart looks exactly like a Levy-Jennings chart, but uses the 1st quartile, median, and 3rd quartile (like a boxplot) instead of the mean and +/- the standard deviation.

There are still some details that need to be worked out.

Since the chart represents the range of the mortality rates, the blue and red areas represent 25% of the hospitals and the green area represents 50%. This means that a unit (such as a cm or inch) does not correspond to a certain percent change. For instance, even though we are representing the red area and the blue area as the same size, we cannot say that one cm above the minimum represents the same percentage change as one cm below the maximum. As a result, figuring out where to plot the actual markers (the Os) becomes difficult.

My solution is that when we calculate the risk adjusted mortality rate for a hospital, we also calculate its percentile. We will plot it in regard to its percentile. For example, if a hospital has a percentile of 12.5% (where 0% is good and 100% is bad), we would plot the hospital exactly in the middle of the blue area. Plotting by percentile also allows us to retain outliers. We simply plot them at the extremes.

First, since we are plotting by percentile, it may make sense to make the green area twice as large as the blue and red areas. This is because it represents 50% of the population as opposed to 25%. This would allow us to express this to the users visually and would also keep our scale for plotting the markers consistent throughout.

Second, we have come to a vague agreement regarding the margin of error and the interquartile range (represented by the green area). At the meeting we decided that if a hospital's mortality rate has a margin of error that is larger than the interquartile range, we would not be able to plot it. This is because we would not be very confident that the hospital belongs in the category we place it in. It may even belong to the furthest away category (ie we plot it as above average when in fact it is below average).

This is a good approach but it needs to be fleshed out. Sometimes a hospital's mortality rate will have a margin of error that is larger than the interquartile range, but may be so bad or so good that we can still safely plot it. Perhaps our rule should be that if a hospital's mortality rate plus or minus its margin of error allows it to be plotted in any of the three categories, we should not plot it. If the margin of error extends only into one bordering category (ie the hospital could be good or average, but not bad) we should still plot it.

Some procedures (CABG and Hip Replacement come to mind) may not be able to be plotted for a majority or even all of the hospitals. This is because the mortality rates are all packed in so tightly. In Massachusetts, the worst Hip Replacement mortality rate is 3%. The vast majority of hospitals have a mortality rate of 0%. A sample size of 200 (a good size) for a particular hospital will result in somewhere around a +/- 1.67% margin of error. This margin of error is larger than the entire range, much less the interquartile range. Clearly, most hospitals will not be able to be plotted for hip replacements.

What is our measuring stick for deciding when to not rate a procedure at all?

- Neal

PS The mortality rates on the chart are made up, but plausible.